

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln. No: To Be Assigned  
Applicants: Stephen Bailey et al.  
Filed: Herewith  
Title: SELECTIVE HYDROGENATION PROCESS AND CATALYST THEREFOR  
TC/A.U.:  
Examiner:

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO/SB/08A and PTO/SB/08B submitted herewith. A copy of the references listed on the PTO/SB/08A and PTO/SB/08B, other than U.S. patents, is enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

European Patent No. 0 124 744 B1 is not in the English language, but an English translation of the claims is included in the reference submitted herewith. Also, pursuant to 37 C.F.R. § 1.98(a)(3), a brief statement of relevance as to this reference follows:

EP 0 124 744 B1 describes hydrogenation catalysts consisting of 0.1 - 60% by weight of a hydrogenating metal or of a hydrogenating metal compound of subgroup VIII of the periodic system of the elements on an inert support, containing 0.1 - 10% by weight of K<sub>2</sub>O and, optionally, 0.001 - 10% by weight of an additive from the group comprising calcium, magnesium, barium, lithium, sodium, vanadium, silver, gold, copper and zinc, in each case

based on the total weight of the catalyst, the K<sub>2</sub>O doping being applied to a catalyst precursor consisting of the hydrogenating component, the support and, optionally, the additive.

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Christopher R. Lewis, Reg. No. 36,201  
James C. Abruzzo, Reg. No. 55,890  
Attorneys for Applicants

CRL/lrb  
Enclosures: PTO/SB/08A and PTO/SB/08B  
Copy of five (5) references

Dated: December 5, 2005

P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

The Commissioner for Patents is hereby  
authorized to charge payment to Deposit  
Account No. 18-0350 of any fees associated  
with this communication.

**EXPRESS MAIL**


Mailing Label Number:

**EV 579428724 US**

Date of Deposit:

**December 5, 2005**

I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Kathleen Libby

10/559501

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Stephen Bailey
Art Unit	
Examiner Name	
Attorney Docket No.	JMYS-137US

SHEET 1 of 2

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US-2002/0068843-A1	06-06-2002	Dai et al.	
	2	US-5,063,194	11-05-1991	Broecker et al.	
	3	US-4,762,956	08-09-1988	Liu et al.	
	4	US-4,404,124	09-13-1983	Johnson et al.	
	5	US-4,126,645	11-21-1978	Collins	
	6	US-4,001,344	01-04-1977	Hoffmann et al.	
	7	US-3,821,323	06-28-1974	Schulze et al.	
	8	US-3,549,720	12-22-1970	Wright et al.	
	9	US-3,116,342	12-31-1963	Robinson et al.	
	10	US-3,113,980	12-10-1963	Robinson	
	11	US-3,068,303	12-11-1962	Pattison	
	12	US-2,946,829	07-26-1960	Likins	
	13	US-2,909,578	10-20-1959	Andersen	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	14	EP-0 124 744-B1	11-14-1984	EC Erdölchemie GmbH		<input type="checkbox"/>
	15	GB-811,820	04-15-1959	Engelhard Industries, Inc.		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

<sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

<sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

<sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 2 of 2

## Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Stephen Bailey
Art Unit	
Examiner Name	
Attorney Docket No.	JMYS-137US

## NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	16	HAYAO IMAMURA et al., "Hydrogenation behavior of propyne on supported Eu-Pd and Yb-Pd bimetallic catalysts with anomalous hydrogen uptake," <i>Journal of Alloys and Compounds</i> , 303-304 (2000), pp. 514-519.	<input type="checkbox"/>
	17	JUNG H. KANG et al., "Selective hydrogenation of acetylene on Pd/SiO <sub>2</sub> catalysts promoted with Ti, Nb and Ce oxides," <i>Catalysis Today</i> , 63 (2000), pp. 183-188.	<input type="checkbox"/>
	18	ABDELHAMID BENSALAM et al., "Palladium-Ceria Catalysts: Metal-Support Interactions and Reactivity of Palladium in Selective Hydrogenation of But-1-yne," <i>React. Kinet. Catal. Lett.</i> , Vol. 60, No. 1, 1997, pp. 71-77.	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

<sup>2</sup>Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.